

Wheat Market Outlook and Price Report: January 30, 2023

By Marlene Boersch/ A.P. Temple/ Michael Wilton
Mercantile Consulting Venture Inc.

i) Background and Rationale for the Report

The following wheat market outlook and price report will be published on a weekly basis on the Sask Wheat Website. The report provides producers with an overview of world wheat markets, a market forecast, and benchmark prices at both the primary elevator and export positions (FOB Vancouver or elsewhere).

The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various Saskatchewan locations (Table 1), grain spreads (Table 2), and FOB port prices and basis (as measured by subtracting the primary elevator price (Rosetown) from the relevant port location price for individual crops) (Table 3). Table 3 is preceded by a description of the various assumptions, definitions and methodology used in arriving at the FOB port prices and in the export basis calculation.

ii) Wheat Market Outlook January 30, 2023

Wheat Production in Ukraine



Source: USDA, UGA

- Ukraine's Grain Association announced last week that they expect Ukraine's farmers will produce just 16 million mt of wheat in the upcoming 2023/24 season. They note that this is likely the best-case scenario, and this projection will only be met if farmers are able to access financing and weather is conducive to grain production.
- If met, 16 million mt of wheat production would be 5 million mt (24%) less than last year and 17 million mt (52%) less than in 2021. We estimate that this amount of production would only allow for 8-10 million mt of wheat exports.
- The UGA says that Ukraine's total grain and oilseed production could fall to about 50 million mt which is less than half of pre-war levels. The decrease in production is because it is not profitable to grow grain while input prices are high, and Russia continues to restrict exports.
- We also note that upwards of 20% of Ukraine's wheat growing area is an active conflict zone.

➤ **Global wheat production and trade:**

There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

Futures:

- March '23 contract **Chicago winter wheat** closed at \$750-0, down 2-4 cents Friday, up 8-4 cents on the week.
- March '23 contract **Kansas hard red winter wheat** closed at \$869-2, up 4-4 cents on Friday, up 21-2 cents on the week.
- March '23 **Minneapolis hard red spring wheat** closed at \$921-4, up 3-4 cents on Friday, up 8-6 cents on the week.
- *Wheat is 3-7 cents higher at the time of writing this (Monday) morning.*

CBOT Mch. 2023 Wheat (1 yr.)



KC Mch. 2023 Wheat

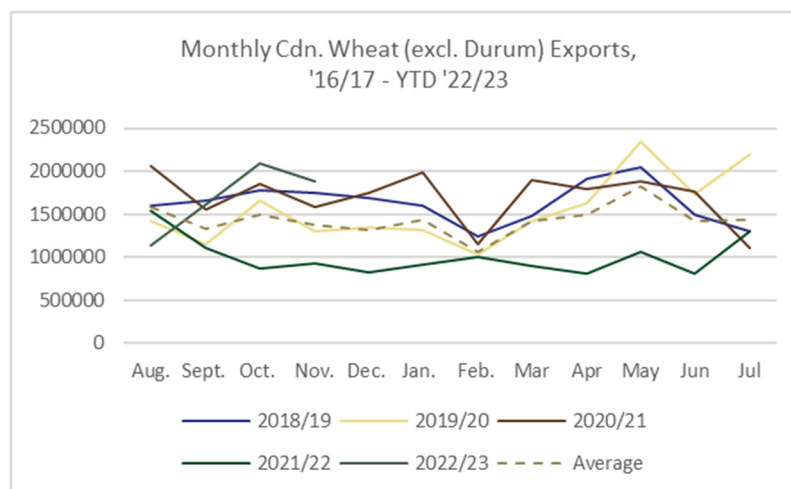


Minneapolis. Mch. 2023 Wheat



Canadian Wheat

- We continue to be pleasantly surprised by the strong pace of Canada's wheat exports. Having exported another 443.9k mt of wheat in week 25, average weekly wheat exports are 381.1 k mt, compared to the approximately 354.5k mt of average weekly exports needed to meet Agriculture and Agri-Food Canada's (AAFC) (recently increased by 200k mt) 19.1 million mt number. Exports usually slow in February as cold weather restricts movement and pick up again in March before peaking in May.

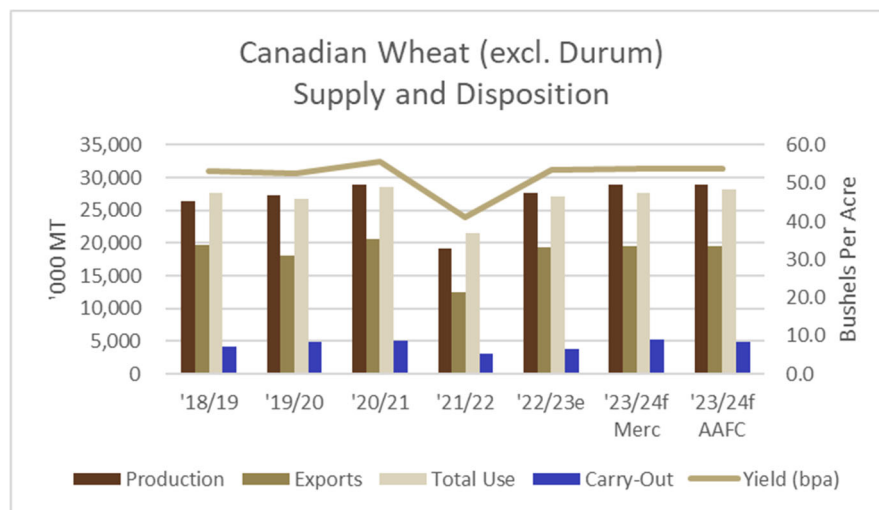


Source: CIMT

(CGC) Grain Handling Summary Wheat		Week 25 (Jan. 22'23)		
(000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 25	503.1	357.9	443.9	47.8
Week ago	533.7	405.3	499.0	116.8
YTD	11,903.4	11,822.7	9,528.1	2,218.7
Last YTD	7,697.3	7,534.7	5,587.8	2,122.3
YTD less Last YTD	4,206.1	4,288.0	3,940.3	96.4
YTD over Last YTD	155%	157%	171%	105%

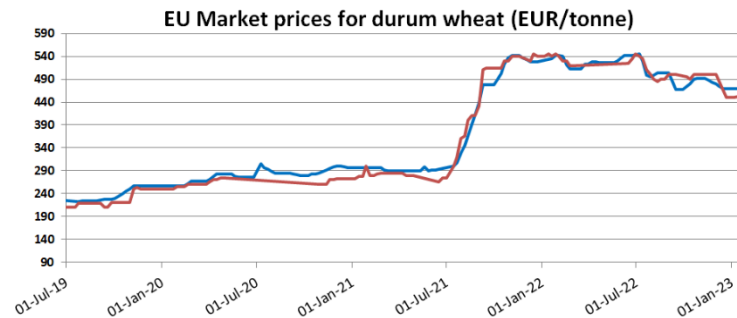
Source: CGC

- AAFC is predicting that the Canadian non-durum wheat seeded area in 2023/'24 will expand by 4% from last year to 20.2 million acres. This is similar to our current projection. The increase in production would need strong exports and use to keep stocks from being burdensome.



Source: Stats Canada, AAFC, Merc

- **Durum:** AAFC released their estimates for the 2023/'24 durum crop. AAFC is expecting a 6% decrease in durum area in the upcoming year compared to our relatively unchanged number. AAFC is using a 36.0 bushel per acre yield which is over a bushel less than the 5 year-average (excluding 2021/'22). Thus, our current production estimate is almost 700k mt larger than AAFC's number. Regardless of production, the Canadian balance sheet will be reliant on exports which depend on production in key importing regions like North Africa and the EU.
- After trailing sideways for the past 6 weeks, durum prices in Italy fell another €10/mt over the week to €460/mt. This is worth about ~\$CA13.00/bu at the elevator in Saskatchewan.



Source: EUC

- Durum exports in week 5 were 220.0k mt for a season total of 2.5 million mt and are now 2 times more than last year's pace. Canadian durum exports are on track to surpass the 5 million mt mark compared to the AAFC's 4.8 million mt projection.

(CGC) Grain Handling Summary Durum		Week 25		(Jan. 22'23)
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance
Week 25	192.4	132.5	220.0	7.5
Week ago	195.6	125.9	167.3	5.8
YTD	2,945.2	3,085.1	2,503.3	343.9
Last YTD	1,586.0	1,919.6	1,253.9	240.7
YTD less Last YTD	1,359.2	1,165.5	1,249.4	103.2
YTD over Last YTD	186%	161%	200%	143%

Source: CGC

- *We would finish sales around the \$14.00/mt level.*

US Wheat:

- Snow and rain continue to ease the drought in parts of Kansas, Colorado, and Nebraska. More precipitation will be needed. The amount of the winter wheat area reported to be under drought conditions was unchanged from last week at 59%.
- Total exports are now 588 million bushels which remain down 7% from last year. Demand from the Pacific Northwest was thin as Asia was on holiday. This is expected to pick up again when they are back this week.
- US HRS for February '23 was valued at \$405.30/mt FOB Pacific Northwest (*up \$5.10/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$385.70/mt (*up 13.80/mt from last week*).

Australian wheat:

- The USDA Attaché in Australia increased the size of their crop slightly to 37 million mt compared to the Australian Bureau of Agricultural and Resource Economics (ABARE) and the official USDA's 36.6 million mt number. Local analysts are still saying that production could be in the 37-40 million mt range.
- FOB values in Australia rose \$10.00/mt over the week. APW WA is being bid at \$350.00/mt.

Argentine wheat:

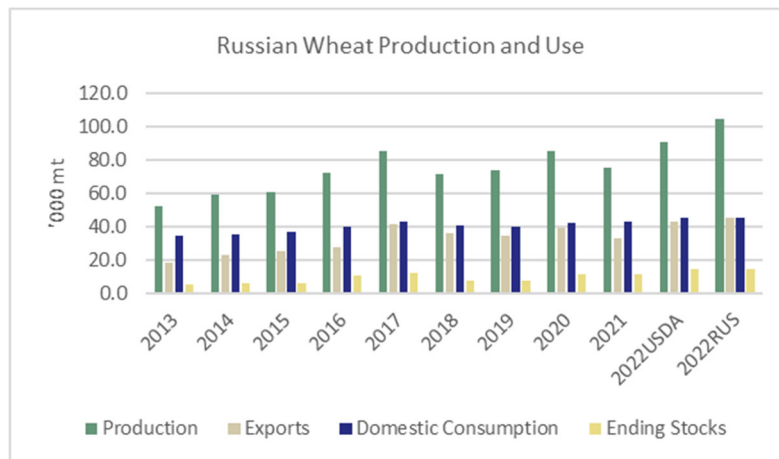
- Farmer sales in Argentina have largely halted and exports have been slow. There has been some rainfall, but more will be needed before wheat planting starts in May.

EU wheat:

- Reports of additional demand from Morocco for EU wheat were supportive of EU values last week which reclaimed all the previous week's losses.
- Non-durum wheat exports from the EU have reached 18.1 million mt, up 6% from last year.
- FOB prices in the EU: February '23 French 11.5 pro wheat closed at \$3326.10/mt (*up \$5.30/mt from last week*); February '23 German 12.5 pro wheat closed at \$332.00 (*up \$5.40/mt from last week*); February '23 Baltic 14.0 pro wheat closed at \$373.00/mt (*up 5.40/mt from last week*).

Black Sea wheat:

- Initial estimates are that Ukraine's wheat production in 2023 will be less than 16 million mt. This would be 5 million mt (24%) less than its 2022 production and 17 million mt (52%) less than its 2021 production. A 16 million mt crop would leave 8-10 million mt for exports.
- Russian wheat exports are on pace to be a record of 3.5 million mt for the month of January. If realized, this would be a 2.1 million mt increase over January 2022.
- There continues to be strong debate over the size of the 2022 Russian crop. The USDA reiterated that they do not think that Russia's 104.4 million mt crop estimate is possible. The USDA is using a 91 million mt number. This is widespread between estimates. We note that the USDA no longer has anyone on the ground in Russia.
- Russia's domestic consumption over the past 5 years is 41.8 million mt on average and accounts for roughly 54% of their total production. The USDA is expecting that number to grow to 45.0 million mt, which will account for 49% of total production (assuming the 91 million mt number is true).



Source: USDA, MARF

- February '23 12.5% Pro Russian wheat is quoted at \$310.00/mt FOB (*up \$5.00/mt from last week*).

➤ **Significant purchases/ trades:**

- South Korea** bought 11k mt of US feed wheat for March at \$350/mt. They reportedly also bought May-June Australian feed wheat at around \$5/mt less.
- US** export sales of 500k mt were right at the very top end of expectations, but the season total of 588 million bu remains 7% down on last year.

➤ **Wheat Market Outlook:**

Significant events over the past week:

- **Vessel inspections at the port of Istanbul** are at the slowest pace since the inception of the grain corridor. The inspection pace has dropped from 2.7 ships per day at the beginning of the month to 2.5 ships per day. A full 40% less than in September-October when inspections were running their fastest. Ukrainian officials are blaming Russian inspectors for intentionally slowing down progress. Total agricultural product exports from Ukraine are 2.4 million mt compared to 4.2 million mt in October. There was strong shipment during the week ending January 22nd, but Ukraine's Grain Association says that shipments last week were just 1/3 of the previous week's movement.
- **Feed wheat is trading into Asia** for cheaper than corn. This will increase feed use until the corn/wheat spread normalizes. Corn prices either need to fall, or wheat prices need to rise.
- The **severity of recent Russian missile attacks** across Ukraine adds to concerns of escalation and expansion of the conflict following the decision on providing western tanks to Ukraine.

Outlook:

Russian wheat continues to dominate nearby prices, but markets are uneasy following the leopard tank deal. The funds are still short wheat, and it is unclear at the moment if they will maintain this or continue buying it back. While the fundamentals are unchanged, there is significant political risk. *Producers should look at finishing wheat sales at ~\$12.00/bu.*

iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MILLION MT

Date: January 30, 2023

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Mar '23 (bu.)	Mar '23 (mt.)
1 CWRS 13.5	\$11.49	\$422.19	1 CWRS 13.5	\$11.49	\$422.19
1 CWAD 13.0	\$12.49	\$458.93	1 CWAD 13.0	\$12.50	\$459.30
1 CPSR 11.5	\$11.04	\$405.65	1 CPSR 11.5	\$11.09	\$407.49
SW Sask			SW Sask		
1 CWRS 13.5	\$11.43	\$419.98	1 CWRS 13.5	\$11.44	\$420.35
1 CWAD 13.0	\$12.44	\$457.10	1 CWAD 13.0	\$12.45	\$457.46
1 CPSR 11.5	\$10.98	\$403.45	1 CPSR 11.5	\$11.02	\$404.92
NE Sask			NE Sask		
1 CWRS 13.5	\$11.18	\$410.80	1 CWRS 13.5	\$11.19	\$411.17
1 CWAD 13.0	\$12.26	\$450.48	1 CWAD 13.0	\$12.27	\$450.85
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a
SE Sask			SE Sask		
1 CWRS 13.5	\$11.10	\$407.86	1 CWRS 13.5	\$11.19	\$411.17
1 CWAD 13.0	\$12.25	\$450.11	1 CWAD 13.0	\$12.27	\$450.85
1 CPSR 11.5	\$10.74	\$394.63	1 CPSR 11.5	\$10.80	\$396.84

Data source: PDQ, Jan. 30/23

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MILLION MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 14.0	0.05	1.89
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.10)	-3.67
1 CWRS 12.5	(0.40)	-14.70
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.00	0.00
2 CWAD 13.0	(0.10)	-3.67
2 CWAD 12.5	(0.15)	-5.51

Data source: PDQ, Jan. 30/23

iv) FOB Wheat Prices and Export Basis Calculation

Background and Rationale:

Reporting FOB prices at port position and primary elevator prices allows the reader to gain an understanding of both local and international wheat prices and to understand the relationship between the two, as measured by the export basis. Export basis can be defined as FOB port position prices minus the primary elevator prices at any given prairie delivery location and is therefore reflective of transportation costs plus any premiums being captured by terminal grain elevator companies or the railway companies, at any given time.

In general, a widening basis is indicative of decreasing system performance in terms of either reduced port capacity or rail service, or both. A narrowing basis is indicative of increased available port capacity and/or better ability of the railways to provide ample service to grain shippers. In this regard, tracking these prices over time has value both in terms of producers being able to time the selling of their grain but also in terms of evaluating and setting policy related to various transportation and capacity issues.

Gray (2015) has calculated a normal basis to be in the range of C\$72/million mt. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/million mt, which indicated an inability of the grain handling and transportation system to adequately handle the record crop produced that year. This occurrence has highlighted the need to improve the level of rail service and take measures to expand port capacity where possible. It has also underscored the need for better price transparency and market information within the grain sector.

Assumptions, Definitions, and Methodology

The following background information should assist in understanding and interpreting international market signals and to relate them to the 'local' Saskatchewan wheat market:

- The price information generated for the weekly report is designed to show farmers at what price levels several wheat classes are trading at local primary elevators (Table 1) and in nearby international markets (Table 3). To express the Export Basis¹ (see *Export Basis* in Table 3)

¹ Gray, R.S. (2015). The Economic Impacts of Elevated Export Basis Levels on Western Canadian Grain Producers 2012/13, 2013/14 and 2014/15.

“The difference between FOB Vancouver prices and the Saskatchewan elevator cash bids to producers is referred to as export basis: Basis can refer to the difference between any two prices. As the largest volume port, Vancouver FOB, minus the elevator bid prices representative measure of the “export” basis for grains in Western Canada.”

defined as Canadian FOB Prices minus primary elevator bids, the FOB prices are translated into Canadian dollars from US dollars and compared to current actual primary elevator Street prices at Rosetown, Saskatchewan (see *Street Prices* in Table 3). Rosetown is used as a proxy for all primary elevators in the basis calculation. The actual handling and transportation costs from the West Coast to delivered elevator (Rosetown area) range from ~C\$58.00-C\$74.72/million mt, depending on number of cars moved and elevator used.

- Approximate relationship between U.S. wheat classes and Canadian wheat classes:
 - DNS 14% in the Pacific Northwest (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific Northwest (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - HRW in the Pacific Northwest (PNW) ≈ 3 CWRS in Vancouver
 - SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
 - HAD (Lakes) ≈ CWAD (Thunder Bay/ Lawrence)
 - Abbreviations: DNS (Dark Northern Spring Wheat); HRS (Hard Red Spring Wheat); HRW (Hard Red Winter Wheat); SW (Soft Wheat); HAD (Hard Amber Durum Wheat); CWRS (Canadian Western Red Spring Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)

- Hard wheat price calculations:
 Exporters in Western Canada generally derive their primary elevator wheat prices from HRS values at the West Coast (Pacific Northwest - PNW). Similarly, HRW values are used for lower grade (3) CWRS.
 - West Coast HRS and HRW values essentially dominate the international hard wheat trade and determine its basic value.
 - If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium.

- Durum wheat price calculations:
 The primary export route for Canadian durum wheat is still through Thunder Bay, not the West Coast of Canada.
 - Nevertheless, the Pacific Coast has increased in importance for durum over time with 38% of total export volume crop year to date.
 - Italy is the single biggest buyer of Canadian durum wheat with 27% of total Canadian durum exports YTD (East Coast shipments).

- Optional origin grain sales:
 Most major international grain companies sell 'optional origin' wheat to their customers and often cover their sales 'at best' closer to the shipment position. The Canadian grain system is not conducive to servicing optional origin sales because the volume of wheat kept in storage in port today is much smaller than prior to deregulation of the Canadian wheat market.

Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT

Relevant FOB Prices and Export Basis			January 30, 2023	
Type of Wheat	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
	West Coast (Cdn./mt\$)	Great Lakes (Cdn./mt)	Rosetown (Cdn./mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$499.34	Closed		
HRS	\$493.20			
HRW 11.5	\$494.92			
SWW 12.0	\$421.35			
1 CWRS 13.5 ³	\$499.34		\$417.78	\$81.56
2 CWRS 13.0 ³	\$493.20		\$406.76	\$86.45
3 CWRS ³	\$494.92		\$393.90	\$101.03
CPS ³	\$414.48		\$303.87	\$110.61
1 CWAD ⁴		Closed	\$477.67	
Competing wheat:				
	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$310.00		February	
French 11.5 (Rouen)	\$326.10		February	
APW 10.5 (W Coast)	\$350.00		February	
Argentine 12.5	\$380.00		February	
¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency ² Basis = FOB Prices CDA minus Street Price ³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS ⁴ Values derived to Lakehead FOB				